



potassium chloride

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Date of issue: 7/6/2018 Revision date: 7/6/2018 Supersedes: 6/27/2016 Version: 6.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: k-Drill®C6 k-Drill®C9 Potassium Chloride 99% KCl Potassium Chloride 99,3% KCl Potassium Chloride 99,9% KCl
Chemical name	: potassium chloride
EC-No.	: 231-211-8
CAS-No.	: 7447-40-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture	: Industrial use Fertilizer
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1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

K+S KALI GmbH
Bertha-von-Suttner-Str. 7
P.O. Box 10 20 29
34111 Kassel - Germany
T (+49) 561 9301-0 - F (+49) 561 9301-1753

Email competent person

sds@kft.de

1.4. Emergency telephone number

Emergency number	: For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
potassium chloride	(CAS-No.) 7447-40-7 (EC-No.) 231-211-8	> 95

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information	: Dispose of materials or solid residues at an authorized site. Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Fertilizer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

potassium chloride (7447-40-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	910 mg/kg bodyweight/day
Acute - systemic effects, inhalation	5320 mg/m ³
Long-term - systemic effects, dermal	303 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1064 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	910 mg/kg bw/day
Acute - systemic effects, inhalation	1365 mg/m ³
Acute - systemic effects, oral	455 mg/kg bodyweight
Long-term - systemic effects, oral	91 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	273 mg/m ³
Long-term - systemic effects, dermal	182 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.1 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

In case of repeated or prolonged contact wear gloves. EN 374. Nitrile rubber

Eye protection:

In case of dust production: protective goggles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2. EN 143

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Colour	: white.
Odour	: none to slight.
Odour threshold	: No data available
pH	: 8 - 11 (Aqueous solution)
Relative evaporation rate (butylacetate=1)	: Not applicable
Melting point	: 770 °C
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Not flammable
Vapour pressure	: Not applicable
Relative vapour density at 20 °C	: Not applicable
Relative density	: Not applicable
Density	: 1.989 g/cm ³
Solubility	: Water: 300 g/l (20 °C)
Log Pow	: Not applicable
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not applicable

9.2. Other information

Bulk density	: 1040 - 1130 kg/m ³
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SECTION 10: Stability and reactivity

10.1. Reactivity

Product is stable.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

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LD50 oral rat	3020 mg/kg
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 8 - 11 (Aqueous solution)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 8 - 11 (Aqueous solution)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Not applicable)

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified (Based on available data, the classification criteria are not met)
Chronic aquatic toxicity	: Not classified (Based on available data, the classification criteria are not met)

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LC50 fish 1	880 mg/l (Pimephales promelas)
EC50 Daphnia 1	440 mg/l (daphnia magna)
EC50 72h algae (1)	> 100 mg/l

12.2. Persistence and degradability

potassium chloride (7447-40-7)

Persistence and degradability	Not applicable.
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12.3. Bioaccumulative potential

potassium chloride (7447-40-7)

Log Pow	Not applicable
Bioaccumulative potential	Not applicable.

12.4. Mobility in soil

potassium chloride (7447-40-7)

Ecology - soil	Not applicable.
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12.5. Results of PBT and vPvB assessment

potassium chloride (7447-40-7)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects	: No additional information available.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Disposal must be done according to official regulations. European waste catalogue. Do not dispose of with domestic waste. Do not discharge into drains or the environment.
European List of Waste (LoW) code	: 02 01 09 - agrochemical waste other than those mentioned in 02 01 08

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

potassium chloride is not on the REACH Candidate List

potassium chloride is not on the REACH Annex XIV List

Other information, restriction and prohibition regulations

: REGULATION (EC) No 2003/2003 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 October 2003 relating to fertilisers. A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

General revision.

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Section	Changed item	Change	Comments
1.1	Trade name	Modified	
8.1	DNEL	Added	
8.2	Respiratory protection	Modified	

Abbreviations and acronyms:

IMDG	International Maritime Dangerous Goods
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
IATA	International Air Transport Association
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
CAS	Chemical Abstract Service
LD50	Median lethal dose
LC50	Median lethal concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit

Data sources : ECHA (European Chemicals Agency). Information provided by the manufacturer.

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KFT SDS EU 07

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product